

The importance of parenting in child health

Doctors as well as the government should do more to support parents

Parenting is probably the most important public health issue facing our society. It is the single largest variable implicated in childhood illnesses and accidents; teenage pregnancy and substance misuse; truancy, school disruption, and underachievement; child abuse; unemployment; juvenile crime; and mental illness. These are serious in themselves but are even more important as precursors of problems in adulthood and the next generation.¹ This is why British and other governments are giving parenting high priority (such as, in Britain, the cross departmental committee chaired by the Minister for Public Health and the prime minister's social exclusion unit).

The importance of parenting arises from its role as a buffer against adversity (such as poverty or delinquent influences) or mediator of damage (as in child abuse). Parenting usually involves biological parents but is not confined to them.² Carers, teachers, nurses, and others fulfil parenting tasks with children. Parenting has three essential components. Firstly, care protects children from harm. Care also encompasses promoting emotional as well as physical health. Secondly, control involves setting and enforcing boundaries to ensure children's and others' safety, in ever widening areas of activity. Thirdly, development involves optimising children's potential and maximising the opportunities for using it. Although a reasonable consensus exists about "bad parenting," there is no agreement about its opposite, particularly in a diverse and rapidly changing society.³

Even more variable are levels of motivation for sustaining this complex and demanding job. Most parents care for their children, sometimes against great odds.⁴ Yet motivation to nurture and protect children is not inborn in humans but acquired and shaped through past experience and current circumstances. We know that factors such as severe poverty and maternal depression seriously distort or damage the parenting process. Yet under such circumstances parental qualities and skills become ever more important because even in adversity parents may protect children against abuse or exposure to intrafamilial and external stresses.⁵

An extensive and complex social organisation exists for dealing with children and family difficulties.⁶ Yet these problems seem to be getting worse, because little is done to alter fundamentally the lot of the most disadvantaged. Help is fragmented between health, education, and social services. Parents are often marginalised to the position of onlookers of their children's management, particularly in health services.

Crucially, most professional responses are reactive rather than preventive. When intervention fails the cumulative nature of children's problems means that further interventions become more costly and less effective. This is seen most starkly in conduct disordered and delinquent children.⁷

General practitioners, community paediatricians, and primary health teams are in a key position to promote services for the whole child, delivered through supporting better parenting. They are best placed to identify children at risk—literally before birth—through their knowledge of the parents and to monitor their development and their parents' ability to meet their needs through surgery visits and health visitors. They should insist that the currently fragmented and inefficient services by multiple agencies should be integrated to make the optimum impact on frequently puzzled and fraught parents. Together with social services and education, they can institute programmes that teach and enhance parenting skills so that parents can take a more effective role with their children.

All this is based on the premise that health professionals are respected experts in children's health and social development and should use this to promote the wider welfare of children, without which their health will suffer. Above all, this demands an urgent shift of emphasis from reactive intervention to prevention and health promotion—which is well justified by the evidence. We know, for example, that low birth weight and mental handicap can be reduced ninefold and disruptive behaviour improved by early intervention.⁸

The result will be emergence of a "parenting society," in which all citizens recognise their shared rights and responsibilities for giving and receiving care, control, and development, particularly to the needy, among whom children are the most prominent.

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Diagnosing and treating chesty infants

A short trial of inhaled corticosteroid is probably the best approach

Recurrent cough and wheeze in infancy are common problems in general practice and paediatric outpatient clinics. Population based research indicates that only a minority of such infants have asthma.^{1,2} For example, data from the 1970 British cohort study showed that only 23% of infants who had had four or more attacks of wheezing in the first year of life had evidence of asthma at the age of 10. Studies over the past decade have provided a better understanding of the factors that lead to these symptoms in infants who have asthma and those who do not, at least in parts of the world with a Western life-style.

The intrathoracic airways of infants are vulnerable to obstruction because of their narrow calibre, and those infants who are born with the narrowest airways seem to be prone to lower respiratory tract illness during viral infections.³ The airways of most infants with recurrent wheeze are not characterised by the bronchial hyperresponsiveness⁴ typical of asthma.² Certain infections (respiratory syncytial virus, adenovirus, pertussis) seem to be capable of inducing airway disease that can cause symptoms for months or even years.^{5,6} Exposure to cigarettes, especially antenatally, can cause abnormal airway function from birth and increases the risk of respiratory illness.⁷ Premature birth, even without neonatal respiratory illness, predisposes to cough and wheeze in infancy.⁸

Although these studies illuminate the epidemiology of recurrent lower respiratory tract illness in infancy, they do little to help the clinician faced with a persistently "chesty" infant, who needs to ask two important questions: Does this child have asthma? And will inhaled drugs relieve these symptoms? We need clinically based research to determine whether features such as age at onset of symptoms, symptom pattern, and atopic family histories will allow us to identify infants who will benefit from asthma medication. A family history of atopy is often thought to identify infants with asthma, but this may not be reliable.⁹ Can the techniques of pulmonary function testing in infancy (currently a research tool) be used to differentiate between asthma and other causes of recurrent cough and wheeze?

For many families the consequence of doctors' uncertainty is 12-18 months of escalating and often erratic prescribing of asthma medication—oral bronchodilator, inhaled bronchodilator, and low dose inhaled corticosteroid. Since most of these infants do not have asthma, their parents commonly see no benefit from these drugs, and studies confirm that in most cases they are ineffective.¹⁰ Nevertheless, since some children with atopic asthma present in infancy²—and in principle should benefit from inhaled drugs—most doctors would want to offer the benefits of treatment to the minority of wheezy infants whose unpleasant symptoms can be relieved.

In this predicament it is common to opt for a trial of oral or inhaled bronchodilator. This rarely provides clarification because symptoms fluctuate hourly and it

is impossible to decide whether any improvement is spontaneous or due to the drug. Similarly, low doses of inhaled corticosteroid rarely produce noticeable improvement—possibly because of the small proportion of aerosol that reaches the airways in this age group.^{11,12}

Faced with an infant with recurrent cough or wheeze, one needs to consider whether a sweat test or other investigations are needed. I would investigate those whose symptoms appear within one month of birth or who have failure to thrive, incessant symptoms, or persistent auscultatory findings in the chest. At the other end of the range are infants with noisy breathing but whose quality of life is unaffected ("happy wheezers"), who probably do not require any medication.

For infants with distressing symptoms, I would advocate a trial of moderately high dose inhaled corticosteroid (doses found at step 3 of the United Kingdom guidelines for children under 5 years¹³) for around six to eight weeks, along similar principles to the two week trial of oral corticosteroid used in older patients when the cause of respiratory symptoms is uncertain. For the minority whose symptoms improve substantially—as judged by a reduction in sleep disturbance, for example—the diagnosis is probably asthma, and subsequent treatment can follow the published guidelines.¹³ Any improvement might, of course, be coincidental, but this will become apparent when treatment is stepped down in asymptomatic individuals. For those infants who show no improvement, there is no justification for continuing to prescribe any drug.

Perhaps the biggest challenge for the doctor is telling the parents that there is no medication that will help their child's symptoms but that in most cases the condition will improve as the airways enlarge and as respiratory infections become less frequent with age. Parents generally appreciate honesty and prefer not to spend 18 months administering treatment without noticeable benefit. Facing up to our lack of treatment for these patients requires more time talking to parents but in the longer term probably reduces the number of calls the parents make on medical services.¹⁴

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Provision of intensive care for children

A geographically integrated service may now be achieved

Paediatric intensive care is a low volume, high cost specialty which depends on the training and skill of staff and availability of specialist equipment. Critically ill children have a changing range of illness and pathophysiology from early infancy to adolescence which is different from that of critically ill adults. In Britain paediatric intensive care has developed in an ad hoc and fragmented way. Now, however, after two decades of effort, Britain may be moving towards a more integrated service.

The Paediatric Intensive Care Society and the British Paediatric Association voiced concerns about paediatric intensive care in the early 1980s. The Paediatric Intensive Care Society has defined standards for paediatric intensive care,¹ and these have been an important reference source that has informed many of the subsequent developments. This document defines two levels of paediatric intensive care. Level 2 refers to stable intubated children or unstable non-intubated children with airway problems requiring continuous nursing supervision, and level 3 to children who require complex therapeutic and nursing procedures in addition. (Level 1 is high dependency care.)

In 1993 a multidisciplinary working party on paediatric intensive care highlighted the fragmented configuration of paediatric intensive care provision.² Its report was based on a retrospective survey of 12 882 children identified as having received intensive care in 1991: 29% were cared for in children's wards, 20% in adult intensive care units, and only 51% in paediatric intensive care units. Of the 2627 children cared for in adult units, 23% were aged under 1 year and almost 5% were aged under 1 month. In adult units fewer than 2% of nurses had a children's nursing qualification. Only 36% of paediatric intensive care units provided a transport service for retrieving critically ill children. All units reported refusal rates of up to 16% of their annual admission rate. The working party expressed particular concern about facilities where medical and nursing staff had not had specific training and where the staffing levels were too low for managing critically ill children.

In 1995 a child called Nicholas Geldard died in a paediatric intensive care unit after a spontaneous cerebral haemorrhage. Before reaching the unit he had been moved from the admitting hospital to another hospital for computed tomography and only then to an intensive care unit (in another region) for management. After publication of the resulting

inquiry,³ the secretary of state asked for a report on the development of paediatric intensive care services,⁴ and the Department of Health set up a national coordinating group in June 1996 to develop a policy framework. *Paediatric Intensive Care: A Framework for the Future*, published in July 1997,⁵ sets out a strategy for developing and integrating the service for critically ill children within a geographical area, over a three year time scale. Implementation has been devolved to the eight English regions. The Scottish, Welsh, and Northern Ireland offices are also considering the document.

The framework report confirmed the picture of fragmented services. Ten of the 29 paediatric intensive care units had 3 beds or fewer and only six had 8 or more. The report cited studies from Britain and abroad which supported the average figure of 1.2 intensive care admissions per 1000 children per year. It considered configuration of the service in terms of flexibility of provision for acute illness and support for tertiary services, the latter often representing half of all admissions to paediatric intensive care units.

Several studies support the view that the most important element of the paediatric intensive care service is the skills and experience of the medical and nursing staff and that therefore the service should be centralised. A study comparing illness adjusted mortality for children living in the Trent region, where paediatric intensive care provision is fragmented among 19 centres, with that in the two paediatric intensive care units in Victoria, Australia—which has similar size of child population and similar rate of admission to paediatric intensive care—showed both an excess mortality and a greater length of stay in Trent.⁶ Studies from the United States⁷ and the Netherlands⁸ showed lower mortality in specialist tertiary paediatric intensive care units.

The framework document's standards also say what facilities each hospital in a geographical area must provide as its part of an integrated service. The service is to be configured around three types of hospitals: district general hospitals, lead centres for paediatric intensive care, and single specialty hospitals. In a few parts of England a fourth type, a major acute district general hospital, has been designated (generally where the lead centre is some distance away). These have a large throughput of adult intensive care patients and already manage an appreciable number of critically ill children, and they may continue to do so up to level 2

intensity of care if they meet the standards. Otherwise district general hospitals must have medical and nursing staff on site who can resuscitate and stabilise critically ill children and separate child orientated facilities to provide support until the arrival of the lead centre's transport team. Single specialty hospitals caring for children must develop joint protocols with the lead centre and also meet specified standards. Within each region a lead centre, or at most two, must be designated, serving a population of at least 500 000 children.

Lead centres should be based in hospitals with a full range of tertiary paediatric services, run a 24 hour transport service for the region, and have sufficient throughput to maintain staff expertise and act as educational and training centres. Lead centres will be responsible for data collection, audit, and developing joint protocols with the other hospitals within the region. Future consultants will have had training in centres approved by the Intercollegiate Committee on Training in Paediatric Intensive Care Medicine. By July this year children who need intensive care should no longer be cared for in general children's wards, and within another two years children should no longer be cared for in centres which do not meet the standards.

Quality of paediatric intensive care includes effectiveness and appropriateness of treatment within a child

and family orientated environment. There is no validated paediatric scoring system for severity of illness in the United Kingdom and no information about long term outcome. We urgently need such studies so that further reorganisation of the paediatric intensive care service is informed by research and audit.

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Breast feeding: the baby friendly initiative

Must adapt and develop to succeed

Breast feeding is unparalleled in providing an infant with ideal nourishment, protection from infections, and much more.^{1 2} Despite this, there is still a strong culture for bottle feeding in Britain.³ The global baby friendly hospital initiative, known in Britain as the baby friendly initiative, was launched jointly by UNICEF and the World Health Organisation in 1991. The objective was to reverse the negative impact that many maternity hospital practices have on establishing breast feeding. The "ten steps" (see box) are intended as a standard for good practice.⁴ The "Baby Friendly Initiative Golden Award" is given to hospitals that complete the 10 steps and achieve a 75% rate of breast feeding on discharge, and the British "Baby Friendly Initiative Award" to hospitals that achieve a 50% breast feeding rate on discharge. By December 1996 there were only three baby friendly hospitals in Britain and another 10 that had a certificate of commitment (for achieving steps 1, 7, and 10).

Why have hospitals been slow to take up this initiative? Firstly, there is little government involvement in Britain, unlike in developing countries. In fact, the British government provides more financial support to poor mothers who choose to bottle feed than those who breast feed.⁵ Secondly, an emphasis on consumers' right to choose makes some health professionals wary of stressing the benefits of breast feeding for fear of making bottle feeding mothers feel guilty.³ This is not an issue in the developing world, where breast feeding is the only realistic option for most mothers. Thirdly, a mother dis-

The "ten steps" to successful breast feeding

- Step 1.* Have a written breast feeding policy that is routinely communicated to all healthcare staff
- Step 2.* Train all healthcare staff in the skills necessary to implement this policy
- Step 3.* Inform all women (face to face and leaflets) about the benefits and management of breast feeding
- Step 4.* Help mothers initiate breast feeding within half an hour of delivery
- Step 5.* Show mothers how to breast feed and how to maintain lactation (by expressing milk) even if they should be separated from their infants
- Step 6.* Give new born infants no food or drink unless "medically" indicated. No promotion of formula milks
- Step 7.* Practise "rooming-in." All mothers should have their infant cots next to them 24 hours a day
- Step 8.* Encourage breast feeding on demand
- Step 9.* Give no artificial teats or pacifiers to breast feeding infants
- Step 10.* Foster the establishment of breast feeding support groups and refer mothers to them

Vallenas C, Savage-King F. *Evidence for the ten steps to successful breastfeeding*. Geneva: WHO Child Health and Development Unit, 1997.

charged early from hospital in Britain may be isolated from her extended family, have only limited support from a community midwife, and find it difficult to cope with breast feeding on her own in a social environment generally hostile to breast feeding.

These differences mean that the baby friendly initiative must be adapted, and developed if it is to progress in Britain. As a first step, the baby friendly initiative should be introduced to the whole primary care team and not confined to hospitals. The critical period when mothers, especially those with their first babies, need the most help spans the few days in hospital and the subsequent week. Extending training to general practitioners, community midwives, and health visitors would ensure that everyone working with the mothers, both outside and inside hospitals, had the same up-to-date knowledge of breast feeding and its advantages. Better coordination with existing breast feeding networks such as the National Childbirth Trust would also give mothers more support. Finally, imaginative use of the media to promote breast feeding might reach more mothers in their teens and 20s.

Most hospitals in Britain have breast feeding policies that include at least some of the 10 steps, and awareness about breast feeding continues to grow. The baby friendly initiative, where it operates, creates a hospital environment in which breast feeding is the accepted norm and mothers are at least given the information they need to make a choice. Remaining problems in some hospitals include inappropriate use of supplemental feeding, advertising of milk formulas, poor teaching of the benefits of breast feeding, and the continuing practice of separating mothers from their babies (R Balendra, unpublished data).⁶⁻⁸

How can we judge a hospital's efforts to promote breast feeding? In a country where most women are discharged within three days of giving birth it is probably misleading to compare breast feeding rates at discharge: they may give a falsely low impression of the number of women who eventually establish breast feeding. Rates at babies' first immunisation two months later would give a more accurate picture. Furthermore,

most mothers have decided how they are going to feed their baby long before they reach hospital, influenced by cultural and economic factors outside the hospitals' control.⁹ Hospitals should not be demoralised by setting breast feeding targets that are unachievable. This is particularly important in communities where rates are low and encouragement most needed.

The main aim of the baby friendly initiative is to make it easier for mothers to breast feed. Government and NHS managers should recognise and encourage its development. The initiative could be, for example, an issue in the patient's charter or an indicator of quality in audit. The current emphasis on maternity services gives structure to the promotion of breast feeding in hospital, but it should not end there. A stronger initiative focused on the needs of women in Britain could be a useful bridge between community teams and their hospitals.

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Protecting children from armed conflict

The UN convention needs an enforcing arm

Once wars and other conflicts begin, children suffer abuse—physical, sexual, and emotional. This is despite international laws to protect them.¹ Recent studies on the psychological consequences of armed conflict have shown that the resultant unhappiness and mental disturbance is so great in children that it can rarely be repaired.²⁻⁴ The answer therefore has to be prevention, and, if that fails, the international community needs to act rapidly to protect vulnerable children.

In conflicts over the past 10 years 90% of casualties have been civilians. Two million children have been killed and 4-5 million seriously injured (usually without analgesia, anaesthesia, or surgical facilities to treat them). Twelve million children have been made homeless, over one million orphaned, and countless psychologically traumatised. Three quarters of deaths from antipersonnel mines are among children.

Inequalities in health care, and the poverty in which a huge proportion of the world's population lives

United Nations Convention on the Rights of the Child (International Law in 1990)

In accordance with their obligations under International Humanitarian laws in armed conflicts, States Parties shall take all feasible measures to ensure protection and care of children who are affected by an armed conflict.—Article 38, pt 4

(table 1),⁵ are key factors in nurturing armed conflict, particularly within or between poor states. In 1996 there were 31 armed conflicts, 24 of them in countries with mortality rates among children under 5 years old of 5% or more. During conflict, 5% of child deaths result from direct trauma and 95% from starvation or illness. Armed groups frequently manipulate food supplies and target health facilities and professionals.

Most refugees from armed conflict have fled to disadvantaged countries that cannot afford to care for

Relative mortality in advantaged and disadvantaged countries

	Population (millions)	GNP per head (US\$)	Mortality under 5 years (per 1000 live births)	No of deaths of children under 5/day/100 million people	Maternal mortality (per 1000 live births)	No of maternal deaths/year/100 million
Advantaged countries (n=25)*	830	24 498	9	30	0.1	163
Disadvantaged countries (n=71)†	2645	706	125	1110	6.7	21 754
All countries (n=190)	5696	4 498	90	600	4.3	10 956
Country at war (Afghanistan)	20	280	257	3670	17.0	88 484

*The 25 countries with the highest gross national product. †The 71 countries where mortality in under 5 year olds is 5% or more.

them, while advantaged countries are inclined to block their entry. By the end of 1997, 11 million people were refugees and 3.6 million internally displaced as a result of conflict.⁶ In 1996, 2.5 million of these were unaccompanied children, who had either been separated from their parents or orphaned. Children under 5 are the most vulnerable in refugee camps, succumbing to malnutrition, gastroenteritis, acute respiratory infection, malaria, and measles.

Torture and sexual abuse of children are widespread, particularly in conflicts dominated by ethnicity. For example, during the Rwandan genocide almost every girl aged over 8 was raped. The consequences of sexual abuse include death, HIV infection, other sexually transmitted diseases, suicide, abortion without anaesthesia or antiseptics, genital injuries leading to infertility, and rejection by the child's community.

There are at least 250 000 child soldiers in the world, with tens of thousands under 15 years of age (R Barnem, Swedish Save the Children, personal communication, 1998). They are small, inconspicuous, expendable, and easily indoctrinated and terrorised into performing extreme acts. They can manage lightweight assault weapons, such as the AK47. Some children are sold to armed factions by starving families, while others are kidnapped.

In northern Uganda, an armed faction, the Lord's Resistance Army, raids villages, forcibly taking away 50-100 children at a time (6000-10 000 in total).⁷ Girls are forced to become sexual slaves, and boys are tortured so that they will abuse and murder other children who refuse to obey the brutal requests of their adult commanders. This series of war crimes has created an army composed of violent child soldiers, but where is the international outcry?

How can doctors contribute to addressing these crimes against children? Advocacy is probably the most powerful tool available to the profession. To be effective, doctors need to remain abreast of political and legal issues affecting children's wellbeing, while being prepared to offer both vocal and practical support to colleagues in war torn countries.

To prevent conflict, doctors should argue for urgent international action to eliminate the gross inequalities in maternal and child mortality between advantaged and disadvantaged countries. The meagre contribution made by advantaged countries to the aid budget of the UN should be reassessed. Despite a recommendation from the 1970 UN general assembly that advantaged countries should donate 0.7% of their gross national product as international aid, the United Kingdom—the 14th biggest donor—gives 0.27%, just over half the proportion it gave in 1979 (0.51%).⁸ An increase in aid budgets by advantaged countries would have a huge

impact on international child health and on the prevention of poverty and conflict.

Furthermore, doctors should argue for the development of a UN force which goes beyond peace-keeping and is designed specifically to protect children.⁹⁻¹⁰ In this way, by focusing on children, international aid can be depoliticised. As well as protecting children, their families, and aid workers, this UN force would ensure that aid reaches the intended beneficiaries rather than combatants. The Carnegie Commission and the UN Association have argued for the development of an international police force of this kind,¹¹⁻¹² and paediatricians will be aware of the invaluable role played by specially trained police officers in protecting children from abuse within families.

Finally, doctors should develop longterm links with colleagues in disadvantaged countries. Early retirement or study leave can be used to provide hands-on aid, educational materials, medical equipment, and moral support. Encouragingly, many doctors already participate in international aid work. The rest of the profession should reflect on the reality of being an ill or frightened child in Afghanistan, Kurdistan, Sierra Leone, or Sri Lanka, and contribute, through advocacy and action, to overcoming the unethical inequalities faced by children in much of the world.

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The UN and Child Advocacy International are looking for a psychiatrist to work in Uganda for 3 months, in trauma and counselling centres for children. Please write to: Professor David Southall, Child Advocacy International, 79 Springfield Road, Trent Vale, Stoke-on-Trent ST4 6RY

Violence begins at home

Domestic strife has lifelong effects on children

Physical violence in the family probably blights the lives of more people than all genetic disorders put together, yet research on the issue has struggled to achieve scientific legitimacy.¹ Violence in the family includes "any act or omission committed within the framework of the family by one of its members that undermines the life, the bodily or psychological integrity, or liberty of another member of the same family or that seriously harms the development of his or her personality."² Separating the causes and effects of domestic violence from those of poor parenting, poverty, homelessness, substance abuse, and violent neighbours and schools is a tough research challenge.³

Estimates of how many people experience violence in the family depend on definition, circumstances, and the method of inquiry,¹ but even the lowest figures show that this is a common and serious problem. Several forms of violence and abuse may occur in the same family; children, parents and their partners, and older family members may be victims or perpetrators and may switch roles at different times.^{4,5}

Violence between adult partners occurs in all social classes, all ethnic groups and cultures, all age groups, in disabled people as well as able bodied, and in both homosexual and heterosexual relationships. It may involve abuse, accusation, and innuendo; deprivation of freedom; or physical or sexual assault. Women are more likely to be injured than men in domestic incidents, but men are not necessarily the initial aggressors.

Adult victims of repeated violence suffer physical injuries; a range of emotional and psychological problems, including self harm, eating disorders, post traumatic stress disorder, suicide; and somatic complaints such as irritable bowel syndrome. Children in violent households are three to nine times more likely to be injured and abused, either directly or while trying to protect their parent. Conversely, in 60% of cases where children have been abused the mother will also have been a victim. The impact on children depends on the intensity and frequency of the violence more than their gender or age, but the presenting features are as varied as in adults. Affected children often have other problems, such as involvement in endemic street and playground violence, bullying in school, educational failure, and exclusion from or dropping out of school, and an increased incidence of attention deficit hyperactivity disorder.⁶ If the mother changes address often or enters a refuge to escape her violent partner, social isolation and loss of friends add to the children's insecurity.

Exposure to violence in the home is linked to juvenile crime. Conduct disorder and antisocial behaviour, even at the age of 7, are powerful predictors of violent behaviour towards partners in adolescence and early adult life. The history of violence between partners often begins with fights and assaults on dates. These complex sequences and associations are probably mediated through a mixture of stress, poor parenting, low self esteem, shame, and self blame. A genetic predisposition to violent behaviour may make a small contribution.⁷

What can be done about it? Many of the causes of violence are beyond the reach of health professionals, but in the case of child abuse acknowledgement by professionals and society that child abuse happened and was unacceptable was the first step towards protecting children. The same may be true for other forms of violence in the family.

Next, all health professionals should be more aware of domestic violence in clinical practice. Health visitors, school nurses, and community midwives are well placed to prevent, identify, and intervene when domestic violence affects children or partners. They do not need a detailed knowledge of family law,⁸ but they do need to know when and how to seek expert help and how to avoid making matters worse. Sensitive questions about unacceptable behaviour at home may help children and parents to reveal distressing situations. Simplistic assumptions about why women get into and remain in violent situations must be discarded—life for these families is seldom simple. Training about violence should be included in routine multiagency teaching on child protection.⁹

What about prevention? Largescale interventions aimed at improving mental health in general and reducing aggressive behaviour in particular seem ambitious. Nevertheless, the pooled effect sizes for a range of community-wide mental health interventions are impressive.¹⁰ Parent support, use of voluntary groups, community parent advisers,¹¹ and school programmes to promote better interpersonal skills and reduce bullying have all been shown to have positive benefits. One thing is certain, however: there will never be one quick, simple, or universal solution.

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Pain relief in children

Doing the simple things better

Paediatric pain management has undergone significant change during the past decade, more so than many other areas of medical practice. Development has grown out of improved understanding of the physiological and psychological effects of unrelieved pain in children, greater insight into the benefits and risks of an aggressive approach to pain management, and greater knowledge of the clinical pharmacology of analgesic drugs in children. The trend towards specialised paediatric units staffed by professionals with training and experience in managing children's diseases has accelerated progress towards optimal pain management, whether for acute, chronic, or cancer pain. Unfortunately current practice still falls short of the ideal of safe and effective pain relief for all children.

A longstanding problem in paediatric pain management has been the difficulty of objectively assessing pain. Assessment in infants before they can speak is particularly challenging and may have been responsible for perpetuating the myth that infants experience less pain than adults. As a result paediatric pain therapy has developed slowly compared with its adult counterpart. Several studies have shown that health professionals consistently underestimate the amount of pain experienced by young children. In response, many pain assessment scales have been developed and validated for use in children using both behavioural and self reporting assessments. The "OUCHER" scale is a simple approach where the child identifies his or her level of pain from pictorial representations of a child's face in various degrees of distress.¹

The move to earlier discharge after surgery has shifted some of the burden of pain assessment and treatment to parents. Although most parents are concerned that their children should not suffer pain, they too may underestimate the amount of pain experienced by children. Little is known about the reliability of the cues parents use to assess pain, and scales such as the postoperative pain measure for parents (POPMP) are not widely used at home despite their potential to improve assessment.²

Although development of sophisticated analgesic techniques (continuous epidural analgesia, opioid infusions, patient controlled opioid analgesia) for inpatient use in specialised paediatric centres continues, simpler methods incorporating local anaesthetic techniques (wound infiltration, nerve blocks) in combination with simple analgesic drugs are used extensively for postoperative pain relief after common surgical procedures. Great scope exists for relieving pain for many children by optimising the use of simple analgesic regimens which can be used in the community by parents and primary healthcare professionals.

A recent advance has been recognition that the simplest and most useful of analgesics, paracetamol, has in the past been used at subtherapeutic doses. Previously recommended regimens of 10 mg/kg four times daily do not achieve therapeutic blood concentrations. Recent pharmacokinetic data suggest

that an initial loading dose of up to 40 mg/kg rectally may be required.³ The loading dose should be followed by regular oral or rectal dosing within the recommended maximum daily dose. The maximum daily dose of paracetamol in children remains controversial. An upper limit of 90 mg/kg/day with a loading dose of 30 mg/kg is becoming more widely accepted,⁴ particularly for otherwise healthy children. Doses above 150 mg/kg/day cause severe liver toxicity and should not be used.^{5,6} Possible causes of overdose include miscalculated doses given by parents, inadvertent coadministration of other medications containing paracetamol, and inadvertent administration of adult formulations to children.⁷

This limitation on the maximum dose of paracetamol has shifted attention to other simple analgesics which can be combined with paracetamol to improve pain relief. Paracetamol and codeine combinations have been shown to be better than paracetamol alone in treating pain after minor operations. Non-steroidal anti-inflammatory drugs have also received increased attention. Ketorolac, ibuprofen, and diclofenac have all been investigated in children, particularly after surgery, and all have been found to possess useful analgesic effects without the emetic and other side effects of strong opioid analgesics. The reported low incidence of side effects with these drugs has strengthened arguments in favour of their inclusion in paediatric analgesic regimens.

There is no simple solution to the problem of treating pain in young patients. Doing the simple things well will enhance therapeutic efficacy, particularly in the majority of children who require pain relief but are managed outside specialised paediatric inpatient units. Accurate assessment of pain, improved parent education, and multimodal analgesic regimens incorporating drug combinations given in safe and effective regimens all have the potential to improve the quality of care offered to our younger patients.

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